

Single Port 10 BASE-T RJ-45 CONNECTOR MODEL NO. : RJLB-042TC1

Features

RoHS Compliant

Fully shielded magnetics protect data from internally generated digital noise

Reduces the overall length of the signal path for improved common mode performance

Implements full common mode termination scheme with used and unused twisted pairs

Meets IEEE802.3 Baseline Wander Compensation specification

Integrates high voltage capacitor to chassis ground

Supports all major transceivers with matched turns ration and complete integration of specified termination

Design for 100base-tx transmission over UTP-5 cable

Operating TEMP. range: -40°C to +85°C

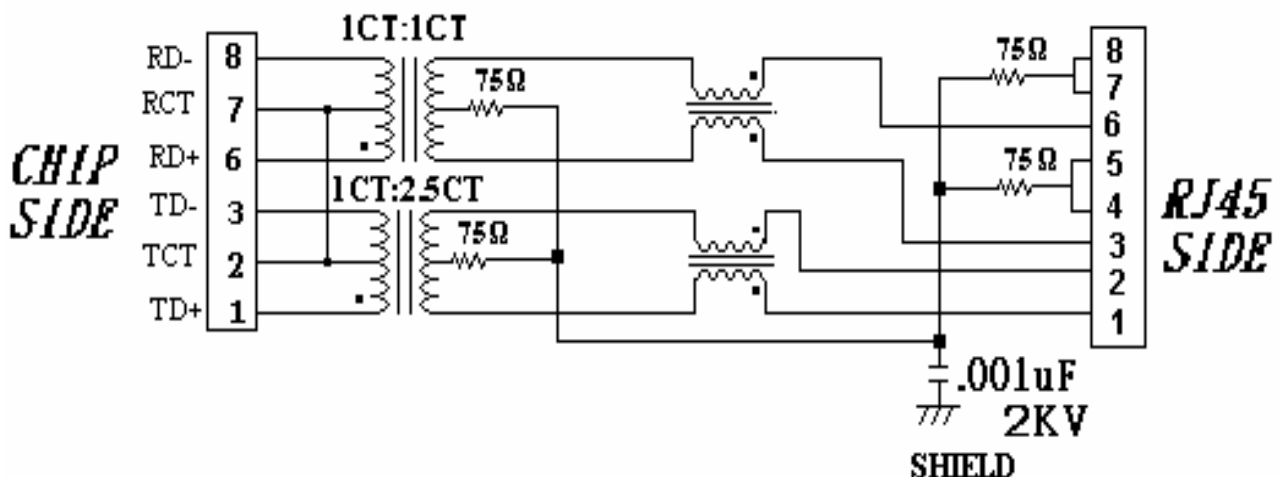
Storage TEMP. range: -55°C to + 125°C

- ⊙ Primary OCL inductance: 350μH MIN. at 100KHz/0.1Vrms with 8mA DC bias
- ⊙ With the LED lamp.

Typical Performance Characteristics @ 25°C

Insertion Loss (dB MAX)	Return Loss (dB Min @100±15Ω)				Differential to Common Mode Rejection (dB MIN)	Cross talk (dB MIN)					CMRR (dB MIN)	Isolation Voltage (Vrms min)
	MHz	MHz				MHz	MHz					
1~100	1~30	40	50	60~80	1~100	20	40	60	80	100	1~100	1500
-1.0	-16	-14	-12	-10	-33	-47	-40	-37	-35	-33	-30	

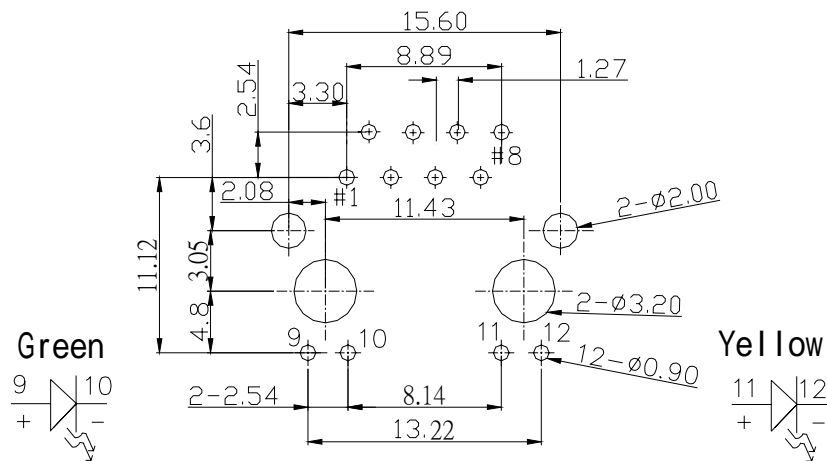
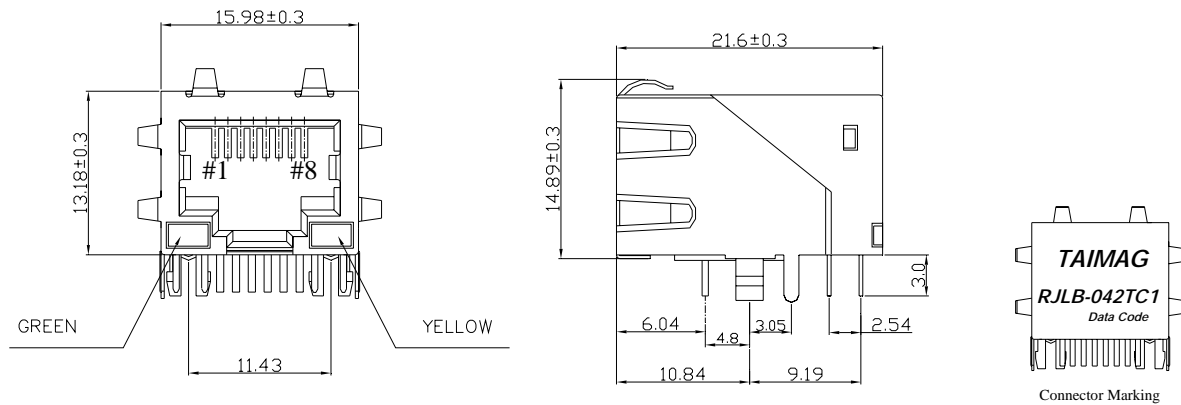
Schematic Design on MDI Interface Circuitry



MODEL NO. : RJLB-042TC1

Dimension: mm

TOLERANCE:±0.15 (unless otherwise specified)



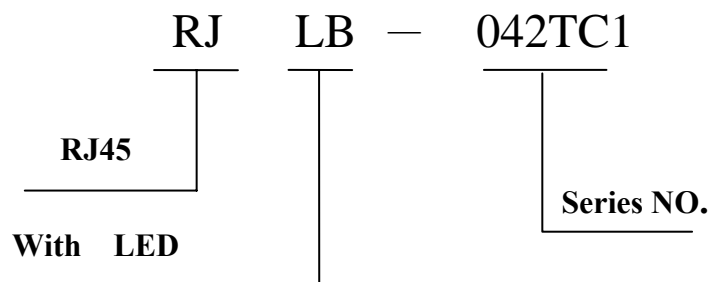
RECOMMENDED P.C.B LAYOUT
COMPONENT SIDE OF BOARD



NUMBER:RD-SDRJLB-042TC1
DATE :2005/09/09 I(REV:A1)

MODEL NO. : RJLB-042TC1

Ordering Information



Requirements :

1. Design and Construction

Product shall be of design, construction and physical dimensions specified on applicable product drawing.

2. Materials and Finish

A. Contact:

RJ Contact : Phosphor Bronze, Thickness=0.30mm

Finish : Contact Area : 6 μ "min. Gold over 50 μ "min. Nickel

RJ Joint Contact : Brass, Thickness=0.3mm

Finish : 80 μ "min. Sn over 50 μ "min. Nickel

LED Joint Contact : Brass, Thickness=0.50mm

Finish : 80 μ "min. Sn over 50 μ "min. Nickel

B. Plastic Part :

(1) Set Housing : Thermoplastic, PBT, Black

UL FILE NO. : E107536

Manufacturer : NAN YA PLASTICS CORP.

Grade :1403G3

Flame Class : UL 94V-0

(2) Insert : Thermoplastic, PBT, Black

UL FILE NO. : E107536

Manufacturer : MITSUI Petrochemical Industries

Grade : CH230N

Flame Class : UL 94V-0

(3) Spacer : Thermoplastic, PBT, Black

UL FILE NO. : E107536

Manufacturer : NAN YA PLASTICS CORP.

Grade : 1403G3

Flame Class : UL 94V-0



NUMBER:RD-SDRJLB-042TC1
DATE :2005/09/09 I(REV:A1)

MODEL NO. : RJLB-042TC1

C. Shield Material :

**Cartridge Thickness=0.25mm
10 μ "-20 μ " Thick Nickel over Brass**

D. LED Lamp

- (a) Lens Color : Transparent with color**
- (b) Emitted Color : Green & Yellow**
- (c) View Angle : 65°**
- (d) Wave Length : Green 565nm ; Yellow 585nm**
- (e) Recommended operation current (IF) : 20 mA**

3. Ratings

(1) Voltage rating : 125 VAC

(2) Current rating : 1.5A

Durability :

- (1) 1000 cycles with no function damage for RJ-45 . Abnormalities shall be present after the test.**
- (2) Low Level Contact Resistance : $\Delta R=30m\Omega$ maximum (final)**
- (3) The sample should be mounted in the tester and fully mated and unmated 500 times per hour at the rate of 25mm/min.EIA-364-09C.**

Model NO.: RJLB-042TC1

1. Unit weight :5.7 grams
2. package : 100 pcs / tray / 0.61 kgms
3. Carton : 1000 pcs / 10 layers of tray
4. Gross weight : 6.6455 kgms

Package drawing:

